

With this design of the reversing clutch there is obviously no necessity of stopping the turbine when manoeuvring, but means are provided for a reduction of the speed down to 50 per cent, which is done automatically in connection with the manoeuvring wheel mentioned above. A turn of this wheel in one direction or the other, more or less, is all that is required for manoeuvring.

On the trial trip which, was run in the end of December, 1920, the steamer had a displacement of 4130 tons, and with 1727 s.h.p. an average speed of 12\*59 knots was attained with a consumption of 1\*07 lb. of coal of 12,600 B.Th.U. per pound per s.h.p. hour. This consumption includes coal for all auxiliaries, steam steering gear, steam heating, and electric light. The corresponding net turbine consumption was estimated to be 0\*912 lb. per indicated horse-power hour.

During the whole of the trial the machinery worked without a hitch, and the very satisfactory behaviour of the reversing clutch was particularly noted. The propeller was reversed from full speed ahead to full speed astern in 27 sec., and the clutch gear wheels worked so smoothly that it was impossible to tell from the sound which way the propeller was working.

Several additional vessels are being equipped on similar lines, and it is expected that the combination of high-speed turbines with mechanical gearing and reversing clutch will prove competitive in the matter of economy with the Diesel engine, which at the moment appears to hold the field for fuel economy in marine propulsion.

